

What is claimed is:

1. A capacitor assembly, which comprises:

a) a first capacitor having a first anode and a first cathode operatively associated with each other by an electrolyte contained inside a first casing, wherein one of the first anode and the first cathode is connected to the first casing as its terminal and the other of the first anode and the first cathode comprises a first lead extending outside the first casing and insulated therefrom;

b) a second capacitor having a second anode and a second cathode operatively associated with each other by an electrolyte contained inside a second casing, wherein the one of the second anode and the second cathode that is of the opposite polarity as that of the first anode and the first cathode connected to the first casing is connected to a second lead extending outside the second casing and insulated therefrom and the other of the second anode and the second cathode is connected to the second casing as its terminal; and

c) a first electrical connector extends from the first lead of the first capacitor to the second casing to thereby electrically connect the first and second capacitors in series.

2. The capacitor assembly of claim 1 wherein the electrical connector is a tab having a foot portion secured to second casing and an arm portion secured to the first lead.

3. The capacitor assembly of claim 2 wherein the arm portion of the tab comprises an opening that receives the first lead in a surrounding relationship.

4. The capacitor assembly of claim 2 wherein the first lead has a collar and wherein the arm portion of the tab comprises an opening that receives the first lead in a surrounding relationship with the arm portion abutting the collar.

5. The capacitor assembly of claim 1 wherein the electrical connector comprises a second lead extending from the second casing and wherein one of the first lead and the second lead supports a channel member having spaced apart sidewalls that electrically connect to the other of the first and second leads when the sidewalls are moved into contact with the lead.

6. The capacitor assembly of claim 1 wherein the first and second series connected capacitors are positioned side-by-side with an adhesive disposed therebetween.

7. The capacitor assembly of claim 1 wherein the first casing comprises first and second casing portions, the first casing portion comprising a first face wall extending to a surrounding first sidewall and the second casing portion comprises a second face wall extending to a surrounding second sidewall with the first sidewall sealed to the second sidewall and wherein the second casing comprises third and fourth casing portions, the third casing portion comprising a third face wall extending to a

surrounding third sidewall and the fourth casing portion comprising a fourth face wall extending to a surrounding fourth sidewall with the third sidewall sealed to the fourth sidewall, and wherein the first and second series connected capacitors are positioned with the first face wall proximate to and aligned with the third face wall.

8. The capacitor assembly of claim 1 wherein a pin is secured to the first casing as a connection for the one of the first anode and the first cathode connected to the casing.

9. The capacitor assembly of claim 1 wherein a third capacitor comprises a third anode and a third cathode operatively associated with each other by an electrolyte contained inside a third casing, wherein the one of the third anode and the third cathode that is of the opposite polarity as that of the second anode and the second cathode connected to the second casing is connected to a third lead extending outside the third casing and insulated therefrom and the other of the third anode and the third cathode is connected to the third casing as it terminal, and wherein a second electrical connection extends from the second lead of the second capacitor to the third casing to thereby electrically connect the second and third capacitors in series.

10. The capacitor assembly of claim 9 wherein a fourth capacitor comprises a fourth anode and a fourth cathode operatively associated with each other by an electrolyte contained inside a fourth casing, wherein the one of the fourth anode and the fourth cathode that is of the opposite polarity as that of the third anode and the third cathode connected to the third casing is connected to a fourth lead extending outside the fourth casing and insulated therefrom and the other of the fourth anode and the fourth cathode is connected to the fourth casing as its terminal, and wherein a third electrical connection extends from the third lead of the third capacitor to the fourth casing to thereby electrically connect the third and fourth capacitors in series.

11. A method for providing a first capacitor and a second capacitor electrically connected to each other in series, comprising the steps of:

a) providing a first capacitor comprising a first anode and a first cathode operatively associated with each other by an electrolyte, wherein one of the first anode and the first cathode is connected to the first casing as its terminal and the other of the first anode and the first cathode comprises a first lead extending outside the first casing and insulated therefrom;

b) providing a second capacitor comprising a second anode and a second cathode operatively associated with each other by an electrolyte contained inside a second casing, wherein the one of the second anode and the second cathode that is of the opposite polarity as that of the first anode and the first cathode connected to the first casing is

connected to a second lead extending outside the second casing and insulated therefrom and the other of the second anode and the second cathode is connected to the second casing as it terminal; and

c) securing a first end of an electrical connector to the first lead of the first capacitor and a second end of the electrical connector to the second casing.

12. The method of claim 11 including providing a third capacitor comprising a third anode and a third cathode operatively associated with each other by an electrolyte contained inside a third casing, and connecting the one of the third anode and the third cathode that is of the opposite polarity as that of the second anode and the second cathode connected to the second casing to a third lead extending outside the third casing and insulated therefrom and connecting the other of the third anode and the third cathode to the third casing as it terminal, and further connecting a second electrical connection from the second lead of the second capacitor to the third casing to thereby electrically connect the second and third capacitors in series.

13. The method of claim 12 including providing a fourth capacitor comprising a fourth anode and a fourth cathode operatively associated with each other by an electrolyte contained inside a fourth casing, and connecting the one of the fourth anode and the fourth cathode that is of the opposite polarity as that of the third anode and the third cathode connected to the third casing to a fourth lead extending outside the fourth casing and insulated therefrom

and connecting the other of the fourth anode and the fourth cathode to the fourth casing as its terminal, and further connecting a third electrical connection from the third lead of the third capacitor to the fourth casing to thereby electrically connect the third and fourth capacitors in series.

14. The method of claim 11 including securing a foot portion of a tab to the second casing and an arm portion of the tab to the first lead.

15. The method of claim 14 including providing the arm portion of the tab comprises an opening receiving the first lead in a surrounding relationship.

16. The method of claim 14 including providing the first lead comprising a collar and providing the arm portion of the tab comprising an opening receiving the first lead in a surrounding relationship with the arm portion abutting the collar.

17. The method of claim 11 including providing the electrical connector comprising a second lead extending from the second casing with one of the first lead and the second lead supporting a channel member having spaced apart sidewalls and electrically connecting the channel member to the other of the first and second leads by moving the sidewalls into contact with the lead.

18. The method of claim 11 including positioning the first and second series connected capacitors side-by-side with an adhesive disposed therebetween.

19. The method of claim 11 including providing the first casing comprising first and second casing portions, the first casing portion comprising a first face wall extending to a surrounding first sidewall and the second casing portion comprises a second face wall extending to a surrounding second sidewall and sealing the first sidewall to the second sidewall and providing the second casing comprising third and fourth casing portions, the third casing portion comprising a third face wall extending to a surrounding third sidewall and the fourth casing portion comprising a fourth face wall extending to a surrounding fourth sidewall and sealing the third sidewall to the fourth sidewall, and positioning the first and second series connected capacitors with their respective first and third face walls proximate to and aligned with each other.

20. The method of claim 11 including securing a pin to the first casing as a connection for the one of the first anode and the first cathode connected to the casing.